

Record

1375 -

[1379-80 in other book]

Mosquitos pp. 1, 3-13,

1375

Mosquitoes on Florida trip, March 1905.

- [1] Temporary rain pools in the pine barrens near jail road, Southern Georgia, March 2.
Isolated 1, 2-3, 4, 5-8, 9, 10 (all dead)
- [2] A similar pool with less larvae further along railroad. So Ga. Mar 2.
- [3] In dirty recessed dry pools along railroad Jacksonville Fla. March 2. Some puddles near dry, one largely pupae. Isolated 1, 2, 3, 4, 5-6, 7-8, 9-10, 11-14, 15, 16, 17, 18, 19-22
- [4] In pools in swampy land near Magnolia Springs, Fla. March 3 [Ditches along track at Green Cove Spgs. full of fish & no wiggler] Isolated 1-2, 3, 4-6, 7-9, 10-12, 13-14, 15, 16-17 (1 skin lost), 18, 19, 20-21, 22
- [5] One wiggler in a swampy piece with cypress knees Jacksonville, 3 miles south, March 4. (dead)
- [6] Railroad ditch & temporary puddles 2-3 miles south of Jacksonville, March 4. Divided into A, B, C Anophelis. Isolated 1-3, 4, 5,
B Short tubed 5-5 (only 4 skins & 1 dead), 6, 7, 8, 9-12 (2 skins lost, two prepared)
C Long tubed 13-14, 15, 16, 17, 18, 19, 20
- [7] In dirty pools near tide water in mouth of creek Riverside, Jacksonville, end of can line, Mar 4.
Isolated 1, 2, 3, 4, 5, 6, 7, 8, 9-10, 11-14 (1 skin lost), 15-17, 18-19 (0 skin lost),
20-24, 25 (killed by cyanide cork), 26, 27, 28, 29, 30, 31, 32, 33, 34
- [8] Green Cove Springs, 2 m. south, temporary pool, pure. A. N. Caudell
Isolated 1-4, 3-5 (skins lost), 6-7, 8-10, 11, 12-13, 14, 15-16
- [9] In a hole dug in the coral rock, white anophely with thin lime, Miami, Fla. Egg boats, all stages & pupal, pure. Isolated 1-3, 4-8 (1 all dead), 9-10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21.
- [10] Large egg boats in a tunnel of sticky milky water in orange grove up Miami River, Miami. Hatched same day. Isolated 1-2
- [11] One larva in head of drainage ditch of old water main at edge of Everglades, Miami. March 7. Stage II. (killed by cyanide cork)
- [12] Egg boat in crab hole full of salt water in edge of mangrove swamp, peninsula, Miami, near canal cut, March 8

1375
Larvae on trunks of Live Oak trees Jacksonville Fla
Mar 1 1905 (To Keayfott)

1376
Minute larvae under web full of red from the
sand dust on back of leaves of Piscidia, Miami Fla.
March 6 1905 (To Keayfott)

1377
Chamfered case larvae on saw palmetto Jackson-
ville and Miami, March 13 (To Keayfott)

1378
Larvae in flower stems of saw palmetto in
the sheathed joints, Miami Fla., Mar. 13, 1905
(To Keayfott)

[1379-80 other work]

1381
new code (or fasciata) try me Sept. 28 1905 on Ceanothus.
Elliptical, rather elongate, tail subacute but not
inflated in the side like fasciata not prominent. Dorsal
cilia over $\frac{1}{3}$ in d. aspect. First anal setae narrow & long
at ends, sides many +, for upper & lower edges & the ridge
3+ apic in retracted. Hd is broad, & dark yellow green.
d. sp. (1)(2)(3)(4)(5) bright yellow sp. S. large, minute smoother.
A narrow yellow line in ① thickened anteriorly, going then
a more diffuse yellow band along ② dots obsolet at ends
a row of yellow dashes in ③. Spots visible. ④ lines
separate at ends. Smooth sparsely round granula as
a smooth skin no regular bumps over a ⑤ edge
dots broken. Length 8 mm. The defined spaces
are without sharp or even defined edges. The granules
giving right across. They are of considerable depth
all of granules round well separated, uniform
size small arising from among the uniform gran-
ules on both sides. Left
d. sp. (3) in low curve of
Olive 60- (4) a small yellow spot
above & broken on below by
(5) large yg. (6) small intersy gap
spots in line. ⑦ Nester surface



13 Larvae in rain water barrels, Bayview Hotel, Miami
March 9. Isolated 1, 2, 3,

14 Egg bats and larvae in a rain water tank and
scabie from a pipe of a reservoir, Key West, Fla. March 10
Isolated 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17

15 More stage I from the Deinocerites hole (12) Miami
peninsula March 12.

16 Pupae & larvae in a dry spring hole, sulphur
water, center of peninsula Miami March 12.
Isolated 1, 2, 3, 4, 5

17 Anopheles in a spring hole and deep hole with
dry in coral rock near an old quarry above Cocoanut
Beach, Fla. March 13. Died April 18.

18 In an old barrel partly set in the ground under the
roof of the old quarry engine house, Cocoanut Beach
March 13. Isolated ~~X~~ ♀ pipiens, ♀ fasciata.

19 Palm Beach Fla. Mar. 14. Culex in rain water pools at
edge of swamp, cut off. A swollen tube, 1, X B flat tube 1, ~~2~~ ³ ~~4~~ ⁵ ~~6~~ ⁷ ~~8~~

20 Palm Beach Fla. Mar. 14. Anopheles in similar pool
with 19 but more open and shallow. (See 18).

21 Daytona, Fla., puddle beside rail road full of new
rain March 15. Isol. ~~X~~ ♀, ¹ ♂, ² ♀,

22 Old water barrel by discarded pump back of Mildred Collier
Ormond Fla. March 16. (fasciata & pipiens) Isolated ~~X~~ ¹ ~~2~~ ³ ~~4~~ ⁵ ~~6~~ ⁷ ~~8~~
~~X~~ ⁹ ~~10~~ ¹¹ ~~12~~ ¹³ ~~14~~ ¹⁵ ~~16~~

23 Permanent or semi-permanent rain filled swamp holes near
the grapefruit groves Ormond Fla. Mar. 16. Isolated ~~X~~ ¹ ~~2~~ ³ ~~4~~ ⁵
~~X~~

24 Ditches by railroad full of new rain like 23 but with
Psorophora Ormond Fla. March 16. Isolated 5 Psorophora = To
Isolated ~~X~~ ¹ ~~2~~ ³ ~~4~~ ⁵ ~~6~~ ⁷ ~~8~~ ⁹ ~~10~~ ¹¹ ~~12~~ ¹³ ~~14~~ ¹⁵ ~~16~~ (17) (18) (19)

25 Sanford Fla. March 17 in ditches & rain pools, mostly
jamaicensis with a few Psorophora = P.

26 Sanford, Fla., March 17 in a more swampy place with leaves
of several water plants but joined to a v.v. ditch and with also
jamaicensis and Psorophora. Separated
A. Culex tube
B. mildred tube
C. gift tube
(1) gift tube

with active spinules, between (5) & (6). i.e. egg post.

Wish

- [27] Tampa, Fla., March 18, in nearly dry pools of black mud at end of a permanent hammock pool in pine barren near the bay. Pool had water lilies, arrowheads, dried edges, no water trees. Larvae crowded in 6 inch pools with Protophora (27 P), also mimicus (27 M) 1. Isolated 1. (Skin lot ~~met~~ XX, XX, XX, XX, XX, XX)

[28] Tampa, Fla., March 18. In cut off puddle by side of same pool. Had Anopheles, mimicus, long tube and medium tube. Isolated ~~met~~ X, P, Anopheles.

[29] Tampa, Fla., March 18. In a dirty mud hole in a yard near dried drainage from water bottling factory tramped by pigs & ducks. Isolated 1-3. S.

[30] Tampa, Fla., March 18. Railroad ditch in low land on outskirts of town. Water covered at permanent with dirty detached pools.

[31] Kissimmee, Fla., March 19. Ditch puddles about 10 days old beside railroad. Some with Protophora and tubes B

[32] Kissimmee, Fla., March 19. Further up the road, puddles, grassy and marshy. (Jamaicensis taken out and joint with 31, 3) Left Anopheles and long-tubes. Isolated X, P, XX, XX (all Anopheles), P. fuscipes, X, Anopheles).

[33] Kissimmee, Fla., March 19. Still further up the road in puddles in the edge of a hammock with cypress. Not permanent but with many plants & dead reeds. Jamaicensis & Protophora but also other larvae which look more (took one jamaicensis & put with 31, 3). Pool Anopheles, all red island.

[34] Kissimmee, Fla., March 20, the other way on the rail road. Like 31 but only skins & pupal lots

[35] Kissimmee, Fla., March 20. Further up road, pools grassy, subpermanent. Jamaicensis, Anopheles, luteus isolated 1. (one adult), Isolated X, P, A, X,

[36] Orange City Junction, March 20. In terrace on canal bank. Pool. Pools 1, 2,

[37] Fresh rain filled pool on island in salt work near Indigoa, Fla. March 21, 1905. Isolated 4 (skin lost).

- 69 Ice cave pool Cobble Hill, Elizabeth Ann Apr 23
 Full of ice, all in I. Isol. 1-2, ~~1~~, 6, 7, 8, 9, 10, 11, ~~12~~, 13, 14
 16-20.

70 Leafy puddle coming down Cobble Hill
 Isol. 3, 2, 3, 4, 5, 6.

71 Swamp Holes in Raven Pass. All in & bot
 on ice. Isol. 1, 2, 3, 4, 5, ~~6~~, 7, ~~8~~, 9, 11, ~~12~~, 13, ~~14~~, 15, 16.

72 Field & bushy marshes below Elizabeth Ann
 Water warm. Larvae $\frac{1}{2}$ grown. Apr 25-
 Isol. 1, ~~2~~, ~~3~~, ~~4~~, 5, ~~6~~

73 Stop jar II. Isolated 1, 2, 3, 4, ~~5~~, 6, ~~7~~, ~~8~~, 9, 10, 11, 12, 13, 14,
 15, 16, 17, 18, 19, ~~20~~, 21, 22, 23, 24

75. Santa Monica Cal., May 10 1906. Dry puddles by track
 in salt marsh full of algae and some sewage. Fish
 & tadpoles. Dark larvae in grass at edge.
 Long tubes. ① pupa. ② died, 3 died, 4, 5. Got more May 18. 6, 7, 8, 9,
 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22-23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33,
 34, 35, 36, 37, 38, 39. [40 found near Playa del Ray May 24] 41, 42, 43, 44, 45, 46.

76. In a hollow live oak tree, Arroyo Seco, Pasadena
 Cal., May 11 1906. all ~~water~~ apparently
 2, 3, 4, 5, 6, 7, 8 Got more in another tree hole. 9, 10, 11-12,

77. In wooden water box in ground, Arroyo Seco, Pasadena
 Cal., May 11 1906. 2 or 3 species.
 1, 2, ~~3~~, 4, 5, ~~6~~, 7, 8, 9, 10, ~~11~~, ~~12~~, 13, 14, 15, 16, 17, 18, ~~19~~, 20, ~~21~~, 22 ~~maiden~~
 3, 24, ~~25~~ 26, 27, 28, 29, 30, 31, 32 long tubes. 33, 34, 35, ~~36~~ short tubes
 or a new lot May 16. Long tubes 37th, 38, 39, 40, 41, 42, 43, 44, 45, 46.
 short tubes 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57.

78. In a cement-lined pond in a fashionable front yard
 Arroyo Drive near Orange Grove Ave., Pasadena, Cal. May 21, 1906
 2, 3, 4, 5, 6, 7 — 8, 9, 10-11, 12, 13, 14, 15, 16, 17, 18-19, 20, 21, 22, 23-24, 25, 26, 27, 28, 29
 31, 32-33, 34-35, 36, 37, 38, 39-41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57-59.

79. In ditches and grassy puddles in bottom of dry "lake"
 a mud, clearwater, towards Santa Ana. Localization like
 75 but water fresh and ground clay, not sand.
 Isolates. 2, 3, 4, 5, 6, 7, 8, 9, ~~10~~, 11, 12, 13, 14, 15, 16, 17, 18.

- c95. In a rain water barrel Santa Catalina Is., Avalon, June 14 1906. (Mr. Candell) X, 2, 3, X, 5, X, 7, X, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.

c96. In water in the cellar 1210 Westlake Ave. Los Angeles Cal., 1, 2, 3, 4, 5, 6, 7-8, 9, 10-11, 12.

c97 In a strongly brackish large puddle, solidly full of fine eel grass between beach and railroad, Redondo, Cal June 25 1906.

c98 Big reedy fresh swamp, San Geronimo, Cal., at mouth of river by the sea. Full of red backs adults. Water deep. Fish 1, 2,

c99. Cattle-track puddles at outlet of 98 swamp, San Geronimo, Cal. Water running in little streams stamped up in the mud. 1, 2,

c100. A large pool of clear water behind a clay dam in Arroyo under rail road bridge at Ostrich Farm June 30 1906. Contains mostly spot-tarsalis, incisus, territans, var-tarsalis?, and a few Anopheles. 1-2 (3) 4, 5, 6, 7, 8, 9 ~~ten~~; 10 spot-tarsalis; 11,

c101. In old tin can at San Luis Obispo, Cal June 27 1906 (Mr. Candell) X, 2, 3, 4, 5, 6, 7, 8.

c102. In pool in a rocky canon on side of big hill near San Luis Obispo, Cal, June 27 1906. (Mr. Candell) H, K, B, H, K, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29.

c103. Rain water barrel at San Luis Obispo (Mr. Candell), June 27 1906

c104. Slopes covered with reeds, Guadalupe, Cal June 27 (Mr. Candell). ① ②, ⑤ ⑦ ⑩

c105. In puddle in bed of river Guadalupe. Cal June 27. ①

c106. In water in a cellar San Francisco, Cal., June 29 1906. ①, ③, ④, ⑫, ⑬, ⑭, ⑮

c107. Puddle by railroad, Eureka, Cal July 2 1906 (Mr. Candell) ①, ⑩, ⑯, ③, ④, ⑤, ⑦, ⑧, ⑨, ⑪, ⑫, ⑬, ⑭, ⑮, ⑯, ⑰

C108. Vents of water on an island opposite Eureka Col. (McCandell) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 18.

C109 Barrel of rain water on an old wharf, Eureka Col July 3 (McCandell) 1, 3, 8

C110. Rain barrel in Eureka. 2

C111 In a drain in Eureka (McCandell)
③

C112 In a reclaimed salt-water swamp. (McCandell) Eureka, Col. 1, *, 4, 5, 6, 10, 14, 15, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31,

C113. Salt swamp at Eureka Col July 5 1906
①, 2, 4, 6, 7, 8, 9, 10, 13, 18, 19, 20, 21, 22.

C114. Slightly blackish water of railroad creek Col (McCandell) ②, 15, 16, 17, 18, 19, 20, 21, 22.

C115 Horse trough, Chico, Cal. July 11, 1906 (McCandell) ①, 4.

C116 Barrel in a stream, Plant introduction garden, Chico Cal. July 13 1906. ①, 2.

C117 Edges of streams etc., Chico, Cal. July 13, 1906
*, 2, 3, 4, 5, 7, 10

C118. Dunsmuir, Calif. in shallow pool of cool water by R.B. July 16-06. insidens

Isolated ①, 2, 3, 4, 5, 8, 7, 8, 9, 10, *, 11, 13, 14, 15, 16, 17-

18, 19, 20, 21-

C119. From a slowly moving ditch of cool sea water by R.B. at Dunsmuir July 17-06. Tarsalis, insidens. Isolated 1-2-3-X-5-6-7-8/9-10-11-12-13-

C120. From the middle of a quite rapidly flowing stream of cool water by the R.B. at Dunsmuir on July 17. Some mud had lodged in the middle of this stream, which was a couple of feet wide and fed from springs. I have not found shells in as rapidly flowing water before. Isolated 1-2 which is all the larvae.

C121. In a small pool of stagnant, skummy pool by R.R. at Shoals Springs July 18. I got too much silt in both & all died. Or maybe it was some mineral.

C122. In cold water in a little pocket in a hill near Shoals Springs July 18. All insidens & thrown out were all small.

C123. Tarsalis insidens.

C123. In warm pool by R.B. in cow tracks near Dunsmuir. July 18. Isolated 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19

C124 In salt pools in thick-leaved plants below sand dunes, Carpinteria, Cal., July 20 1906.
X2,3,4,5,X7,X9,10,11,12,X14,X16.

C125. In slow half mile from R.H. near Shasta Retreat, July 21. All tarsalis none isolated.

C126 Sisson, Cal., 3500 ft., July 23 1906 in springy grassy meadow. 1,2,3,4,5,6,7,8,9/10 White Dixa

C127 Sisson, Cal. July 23 1906. In edges of cold stream covered with grass. 1,2,3,4,5,

C128. Sisson Cal. in roadside puddles.

C129. Small, cal., July 25 1906 in puddles in Alfalfa field and caught. 1,2,3. Caught same evening July 28.

C130. In rain barrel, laundry station above Pokesumma Cr Aug 26 1906

C131 Klamath Falls, Or., in marshes pools etc and caught. Aug 27 1906.

C132 Klamath Falls, Or., in hole in rock dry at Sewt. works, Aug 27 1906

C133 Tacoma Wash., Aug 1 1906. In pools on salt wash and caught in grass nearby. Isolated 20.

C134 McNamee Wash., in a pool cut off from a stream at Paradise Valley Aug. 3 1906. 1,2,3,4,5,6,7,8.

C135 Ashford, Wash. in a muddy pool. Incilius common in barrels. Isolated 1.

C136 Wellington St. in Dr Taylor's rain barrels and in a stream full of water weeds. 1,2,3,4.

C137 In a puddle near the lake edge, Lake Louise, Yggs Alberta, Aug. 18 1906. 1,2,3,4.

C138. Rain barrel at depot, Calgary, Alberta, Canada Aug. 22 1906, 1,2,3,4,5

C139 Rain barrels in ground at railroad medicine Hat, Alta Aug 23 1906. 1,2,3,4,5,6,7,8,9,10,11,12,13.

C140 Puddle cut off edge of shallow lake, North Portal, Sask. Aug 26 1906. 1,2,3,4

M [for Mosquitoes in BB] 141 Anopheles and Mano-
taeria in dog pools with cat-tails, Arlington
Va., August 12, 1917

M 142 Anopheles and Culex in swamp under grass and bushes, Arlington, Va., Aug. 26, 1917

M 143 Egg nests deposited at night on the screened house in the rain water, August 1917

1382

Red Cleggia, Burke, Summerland Cal., Dept
Agr no. 4430. Eggs of fall 1906. In mass on cotton
cocoons with white frost and dark gray hair from
moths. Egg subspherical with smooth.

One hatched May 15th 1907. Hd rounded block w. 5± Body
subcylindrical, somewhat quadrate, square ended. Large sd out
on first 2 pinnacels, gray trace of light color band sd on
5-12. Next large block II III IV VI. Hair very abundant
black d. pale s-v. Feet long with long shaggy bristles
at spine. More hatched May 17

IX VIII Aug 17 1907

15

1383 = 911.

Egg of Cabecodes confusalis Sc June 19 1907. Sub-
cylindrical, the microvilli cut evenly through the
flat area near as long as the central diameter.
The end rounded, the 2 diameters nearly equal.
About 20 longitudinal ribs over sharp ridges crested
stopping at the edge of the truncation, slightly隆起
con, straight for obscure. Microvilli thick coarsely
reticulated at the edge over centrally. Black pen
turning to dull red, the ribs & sets. ablates. 9x.6x.5.
Hatched July 1. Hd rounded blackish slightly shiny epistoma
white. Fins moderate, other parts the feet normal.
Dark areas narrow banded with grayish white, a narrow
band a V-shape between the feet a little irregularly edged
& abdominal bands 2 as broad as the intercyclic spaces, and
in 5-9 cut by a narrow thread-like sd line which
widens at its front junctions with the dark areas
and surrounds vicinally a base of dark d. line
cutting the white bands and, in legs, and divided
by a broad adv. s margin medio-v. latus, 10-13 with a
narrow sd and broad blotchy s-v white wings, line
feet dark concolorous. Ate dandelion, several trees -
July 11 in II? Hd .7 quadrilater rounded slightly blotted under
that high narrow block epistoma and a 2 ventral mottled
line ate lobes white. Hd round, feet normal well
post, legs annulate. Dark areas brown a basal D
white shade on 5-9, a long mottled last blotch partly
cut by s-v fold. Shant white smoothing sd, esp. a tubular
in 2-5 10-13, ventral dotted or tubercles. No fat block
and feet large dark with a white outer line.
Setae inconspicuous, no bumps or elevations.
A median white band cut by a longitudinal line and
the annulet incisures.
Shed off 16 Hds. Same Hd round quadrate wide minus
block but broad mottled red white band on face of each
lobe, divergent below, a white triangle in D, epistoma & base
2 anal. white. Body white, weakly annulate, d. & ova
lobate patches as before, more mottled aw. cut by great
wht. which is darker, crimson to cockroach. T in last position
turning white.

Shed off 21 Hds 1.4 Same markings, more dotted
Hd on the black epistoma white, white tipped bottom

body was orange & top was olivaceous - 3, round pink
Patch at top of neck and a small dark blue, iridescent
iridescent feathers, brownish black remainder. Dotted
white at base 2-3 segments 5-6 covered by black
and by rounded incisive, sharply pointed, faint
dotted, on 11-12 a naked hollowed out cavity containing
the triangular muscle. A series of stiff white patches
5-7 would form broad lobate look 2-3 being a
medium long ones and others becoming shorter
and more & 12 points around white streaks at 2-3
holes 4-5 and each centered small white dots
on edge at 11 & 12. Orange blots in white dots.
The rest of body was yellowish tan and
dotted with blackish 5-6, orange in.
The 17th was a very pale blue at top and a very
small black and orange below on sides
and bottom. The tail was long with
longer feathers and the middle ones were
longer than the others. The long
feathers were a bit whitish and very short.
Color of body was orange brownish top, not
quite brownish tan below. Orange blotch
on chest on 5th ventral foot 2-3 dots. White to
orange on 6th ventral foot. Orange and brownish in
the middle of body. Brownish anterior ends
of wings and 10 white dots 13
iridescent with white base of tail
blackish and covered by numerous
white dots 13, 14, 15, 16, 17, 18, 19, 20.
And 21 at 24 small yellowish dots on middle
of tail at 2. Colored as before but with more
dots and may be described as, all with a dotted
blackish base which are confluent or
separately, and like median section of
the 10-13, and like median section of
the 10-13 with a tiny black spot on white. I observed
them at white. These dots have been made
very irregular, scattered, few of which extend
over from 12-13, others elongated than others
and others are broken, isolated, scattered so to speak
so that small dots are with some of the larger
ones. Some yellowish dots on the sides. Orange

1507
Left side from egg sent by Dr. Cooper
in the tail. No. 12 same July 16 in plate
in colors. No. 3-4 white anteriorly & 5-6
blue streaked on each side with white
and orange dots & 7-8 in entire posterior one
and a slight brownish feather
at 10. The remainder is brownish
at 11. Orange yellowish brown
at 12. Orange dorsal line extending on each
side to 13. Orange pure black at
14-15. Orange yellowish brown
at 16-17. Orange yellowish brown
at 18-19. Orange yellowish brown
at 20-21. Orange yellowish brown
at 22-23. Orange yellowish brown
at 24-25. Orange yellowish brown
at 26-27. Orange yellowish brown
at 28-29. Orange yellowish brown
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Catocala confusa Hiltz
Based upon a fig. of Dr.
Morrison pl XIII fig. 16, with no appearance
of male host 'blue' in the larva
of Gloriosa lar. which is probably
not the distinct species. According
the larva does not appear with

Book of Correspondence, 90 New
(entitled 1157 1887) available
possible for record of attendance.)

The hours were spent
giving over both time and
penitence. The "procession"
the first account of the Ma
lxviii ~~April~~

154

and had been egg eaten by big cockroaches
The Cal. Martineau probably in plantation
in February. Hd. 3.2 mm. old ovule, 6.2 mm.
long, rounded on each side with white
irregular dots & 2 or entire surface above
is with a bright Anna Lee pattern
of rounded orange-yellowish, yellowish
yellowish brown spots. Hd. 7 mm.
long, 3.5 mm. wide. Dribs yellowish brown.
Skin, flesh greenish brown, wrinkled in and
out. Hd. 9.2. Surface greenish yellowish
brown, with pale tan spots. Hd. 10.5 mm.
wide, slightly oblique cuts, 6 had thick
brownish black markings of various sizes
placed over surface, and which
will be white when cut and dried
24 seconds brown and which
will be brownish tan
and a little yellowish
Lucaria wrighti!

254

and Umbrella Tree which has picked up 100
new black leaves & the older ones turn
red when in full leaf. Patch 3c.g. 3-4 black
leaves per square foot & some white dotted patches
with yellow & green with black & a good deal
black especially at the base especially here & under
the tree. Woods a long white oak 20 about 11-12
and 6-8 red oaks one 14 inches in db, fairly
big bush in a little hollow about 8, a young with a band
of 13 leaves yellow green pale yellow, others a
mixed green 10-13. White dotted shrub very
thin leaf, narrow yellowish red pink shade pale yellow
in sun dark red or orange all round somewhat
yellowish green stripes red shade 12-13. White with
yellow stripes & dots 1-12 white, small shrub
white dotted rounded a whole ground. Small white
one foot 10-11 leaves
green & yellow leaves of bush

Argiope aurantia. Adults from the hilltop.
July 18, 1917.

spotted, bounded by a dark border
but not under chin. Lateral glands, the
lateral glands, are the same as those in the breast.
Lipos are few and at 5 cm. very numerous, small
fusiform buttons and a few fat glands. The ventral
breast and the flanks are covered black by sparse
dark brown or yellowish, irregular blotches
and dots. The dorsal and upper parts are white.
The upper part below the black is a pale blue,
greyish, top mouth parts, are a pale reddish orange
color, sides yellowish, a pale yellow very narrow
band, but about 1/2 of the distance above the mouth
12 mm. long. Tail very strong, the dorsal
line of scales being dark brown, the ventral
are whitish. Tibial shield black. Legs brown
with white spots on the knee and foot. The fore
limbs, which I think have been painted black
of the original, and you will notice that
the hand is black and the fingers are white.
The head is black except the white patch on the
forehead, and 2 patches on the sides of the
neck. Body, chest, the lower part of the feet and of
the tail, black, the rest are greyish. Below white
with greyish, black & dark greyish brown & white
blotches, which are not very large but
which follow one over another. The
tail black with white spots, black, white, black
and white stripes. Neck & sides black. Back black
at first, but doesn't remain all over about in four
quarters, the black merged, dark grey to black, then
followed with white. The lips reddish, the tongue
black, the lower edge of the plate reddish with white
markings, cutting the white black edge but with the
white. A pale blue patch below each eye to a
small point, the mouth, but on all the way, large &
in the shaded areas, it was covered with light.

yellow

through white band, notes at 5, which faded
and the diversities notes at 10 until a
distinct note at 10-12 of the third, of short
notes, with dotted

~~steps but 2.1-2.4 but dotted quiescent, about as long
as wide, situated below middle, and just to
right, large red brown darkened reticulate mark
with crevices, reddish black. Red, yellow, or
brown, tapering 5-2 in small head, & dying off
at distal end of a slight lobe to 13.
Black, white striped dotted, 8-10 red black
white dotted and 2 white lines about 1/2
width apart, cut by a few very fine
black dotted & broken, yellowish white reddish
or center of rays. Ed. Made straight, following
reddish " " covered by a thin layer of fine
hair and covered with orange, a hole of 14.
Black stripe along a few of which like layer
on to the outer & now slightly lower the other
on W. Edge of tail green grey with many
white dots. Back & black with few dots 5-12
separated by a red & black darkening
the back fins, the red skin distinct, the white
dots red. Spineless, no scales on back with
a white spot above W. Scales on back even
irregularly (weak & broad) very scattered 2-5
falling out at 5, strongly overlapping 5 for the
rest. Scales scattered with blackish markings
in center of rays, & a line there, by rays
black streaks strong 11-2-5 marked a dot,
white dotted fading to white. A few pale
brown, and pale pink giving a slight cylindrical
row. tipped weak glands regular in line of hair
purple. Circles of old feet in a beige and dark
in shades above mixed even 7.
egg to a whit woolly mass~~

11.33

July 1 from 10
10 miles west
of town. Found a single isolated
specimen. Body yellowish green 18.0 mm.
wide 9.8 a little wider & was very shiny
glossy greenish, with big plate shaped on top
and large broad transverse shiny plates. F. 7.2
in width on the middle plate simple
egg yellowish green, pale green above
the very thin skin which all dried
black radiating from the center. Gills clean
irregularly D. .6 Laid in a patch
wood & a thin layer of white moss.

1386

had hatched last night (7 or 8) at a egg shell
Tropic H. C. Day 2 17.0. Shell mostly elevated but not
quite spherical, had even base with
slight evident transverse & shiny as
normal. 1.1 x 1.0 high & low; low
middle for base blue.

Stage I. Elliptical, pointed ventrally being
flat and thickened, had slight lobing
all smooth shiny translucent white
body giving a green tint. At small white
in 2. Spines long tapered, right side
a false central point — 3 on
3.4. Zebra on the side, apparently quite
normal as in bottom white which
alternate w. 7.6 11.9 so now being
retained. S-v also equally long and
alike uniform. So under a little more
opaquely white.

Stage II. Elliptical body flattened &
base thickly covered black
placed on the 3d margin
of what was left except
again where one short at the
posterior intermediate, 3.2
the long one before the first division
was straight before, then a short one not long &
one alternating, the 3d long one being the first in base
of brown & slightly thickened brown, a narrow green
all green over into short pale brown, 3d brown
greenish, concealed. Bottom & white green
like green. A lot of white entire head of 2,
short at 15 elliptical flattened, the 3d brown narrow
not radio brown, brown radiating, mostly the
7.9 & 11 a little over 1 as long as the others
and face not greenish white with much white
bulky at other times, covered with fine soft
down. Transverse pale green, the base
a little purple, the veins almost purple
a dark maroon.

II

Very long before the first division
was straight before, then a short one not long &
one alternating, the 3d long one being the first in base
of brown & slightly thickened brown, a narrow green
all green over into short pale brown, 3d brown
greenish, concealed. Bottom & white green
like green. A lot of white entire head of 2,
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a little purple, the veins almost purple
a dark maroon.

[See 732]

2 lost hours at open Sept 3.

Opuntia L. *Opuntia* L. 187.

3rd instar larva about ten & one-half days old
hatched out yesterday evening, was pale cream colored
with a dark brown blotch at the point of egg rupturing, its body
slightly longer, legs, etc., all about whitish, full
blue-green buring red, .8 x .5 x .8 mm.
Hatched out at 10:30 a.m. with orange brown & also
some faint reddish bands across whitish, a pair
of red bands on the fore part of the head, a band
of broad whitish stripes running the length of head
very black around base ending in a broad white
ring near edge.

shed built 3 1/2 ft. back of the house, roofed
in shingle, and painted white. Built this
out of old lumber found in the woods.
This week we've made 30 bags
of sand and a hundred sides for the garden
and several boxes the same. Played cards
the first three evenings, whilst home but in a
dark room about round lots at 4 and 6 p.m. (I)
then a mate kindly allowed a book upon his
table of which I availed myself. 3-4 hours
we sat & talked. Womble wrote in each hour,
then went back to bed and I for 12-13 all day
at a little break but I often lay in the sun.

the 2nd of Oct. The old bear had grazed well, as when I shot him he was loaded with fat, having a large amount of fat on his back, which was probably rocky. He had eaten no grass, nor any other vegetable, since he was

to 12, esp. on 9 where they are papillae, both
dark. All surfaces dark and a fine bluish-green
center purple from under most of the dark
black scales, side bar, fins, tail and ~~gills~~
with pale skin with darker whitish dots and
fin reddish mottling and black streaks. No
gill colors from black band up to 12 scales, dark
brown without, 9-13 also dark like dorsum.
and white shade as 5.

Very large bird about 50 cm., feet long, full
at water, bill oblique, bluish gray dotted with
a few minute trichomes which do not give
any form & I am unable to see properly, whitish
with dark streaks in front, has likely a blunt upper
bill, 6, 9 and elongate, yellow, with black
striped median & 4-5 others near it with
slight black on top, back brown streaked and
marked, the outer side of antennae the rest
yellowish pale and from 9 to 10 complete
white streaks, each 1 cm. 7-8 blackish
streaks faint - no markings collar in rear
and 9-10 large ones, the wings have

On 5 Sept. 1897

Long Island, Suffolk Co., N.Y.
Ne. Long Island, off the coast of the
Long Island Sound, about 10 miles
from the mouth of the Bronx River.

Length 100 mm. and 100 mm. in head and
body. Head rather deep and elongated,
snout long, nostrils large, mouth oblique, slightly ventral.
Teeth in upper jaw black, small
conical, concolorous with body and skin, and
slightly raised above surface by flesh which
is thin, bluish, acting as a shield. Lower jaw black,
but gradually becoming brownish green below, and
then black again. A. 3 & 5 dorsal, soft 10-13
greenish, yellowish, whitish, or silvery, with a dark
band through middle, and a dark
lateral band.

Anal green with a dark spot. Dorsal fin brown
and white, base striped green.
Caudal fin black at first, brown then white, with
a dark lateral band, a band of brown posteriorly,
below body moderately colored, orange, yellow,
and small tubercles. Anal white, with a dark band
brown, ventral brown with a dark patch.
White underparts entirely in red and black. The scales
and fins 100 mm. long are small, all
yellow, except a little brown on the dorsal, eye
and white body cylindrical and narrow, and
anterior part of body profusely brown, with brown
brown streaks green, which on 20 mm. are 1-13
and 20 mm. brown 1-13 with a light scale line.

Slightly collared with a transverse black line, nearly
but less than 1.8 times as wide as the black
near anterior markings, and posteriorly, 2d just above
base of the pectoral, very numerous angled at 3
with pointed points curving to the right, else smooth
and thin, anterior raised tubercles, and slightly elevated
brown areas mesophaean. Vomerine plate black, profusely
brown like dark brown near anterior markings,
more pale at line between the 2 angles of 3, a slight
d. following on before the latter. Vertebral fin black
extending to dorsal, rounded edges on posterior tubercles,
black ventrally dark rather blue, the 3d slight elevation

but not conspicuous. Shield and opercular bone
black.

9/1/09

10 miles west of town, flat bottomed, 40' water
edge at stage driving by telegraph wires and
telegraph poles. Poles from L. 7 to
marked with a mark when 40' above water.
Telegraph wires from 10' to 15' above water
black gold dust between poles. Stage
and road gravel where the 40' begins.
Wd. & Td. all over bottom about 1/2 mile. Banks
cut into the sand, many sheep and a few
sheep houses.

10 miles west of town, a bank
about 10' around bed and sand gravel with
the top 4' black gold dust with the
black gold dust mixed with gravel and sand
in the bottom. The top 4' is black gold
and they speak of it as "black gold".
Black gold is pale green or yellowish green
with some red in it. It is
not black gold in color
but it is black in color.
The black gold is
very fine sand and the
black gold is very fine sand
which are found in the
black gold. The black gold
is very fine sand and the
black gold is very fine sand.

Stems 1-2 dm. tall, slender, erect, glaucous, smooth, greenish-yellow, becoming yellowish-green at maturity; leaves linear-lanceolate, 10-12 mm. long, 1-1.5 mm. wide, acute, glaucous, smooth, greenish-yellow, becoming yellowish-green at maturity; flowers white or cream-colored, fragrant, appearing in whorls of 4-5, often by the middle of the summer.

so much to his health, so too kindly and frank
object lesson.

5-10 mm. at white top, pink. Starts about a little
near center of 3-5' long, 11-13 lbs. g., broken
every 2 inches, no ridge at ① like 3-4' ones mentioned.
① back 3 inches 4-5' long, 6-10 mm. (6 on outside),
11-12 mm. 12 feet 13' pink like 3. Green 3 mm., 4
long than ③, 6-9 small (9 outside) 10 wide 11 long like
4. Loop of very soft leather. Tail base green
then yellowish black streak, into which even an open
yellow bridge 3 crossing them to tail to D4, joining yellow ③^{down}, then narrow ③ 12 to ④ 12; yellow tip 4-5' back
a base of ④ ① joining each other 6-10, tapering to point in
back; one spot ④ ① narrowly joining ③ 12. Dorsal 4-6
well above rest in pinkish, the dorsal skin covered with
a d. question irregular light blue line spots 6.
The creases diagonal in back curved ridges. Body p.
(1) whitish blue between blue lines and ④ pink
various whitish dots here and by ④. (5) 6) back
darker dots at bases of ③ ④ ⑤ against yellow back
4 rows of dots 12' long, 11' 12' 13' 14' 15' 16' 17' 18' 19'
a lot of orange hind in middle each side white lines, in
the 10' replaced by bright blue on 6-8' 11' (green)
up to 13' very few - on 10' 11' 12' 13' 14' 15' 16' 17' 18' 19'
on 10' 11' 12' 13' 14' 15' 16' 17' 18' 19' 20' 21' 22' 23' 24'

911/59

137

Female in May, very pale, with traces of
brown on head and at posterior end of body.
Length about 10 mm. but
tail very long, about 1/3 of total length.
Color in dorsal view pale yellowish green,
with brownish markings on sides and posterior
part of body. Tip of tail brown. Dorsal fin
brown, with yellow base, base of dorsal
fin brown, with yellow base. Anal fin
yellow, with brown base. Caudal fin
yellow, with brown base. Pectoral fins
yellow, with brown base. Pelvic fins
yellow, with brown base. Fins all
thin and pointed.

Young in May, dull olive green. Same last
markings as in female, but dorsal fin
brown, with yellow base, and anal fin
yellow, with brown base. Color of body
greenish yellow, with brownish markings
on sides, yellow base. Dorsal fin
yellow, with brown base. Anal fin
yellow, with brown base. Caudal fin
yellow, with brown base. Pectoral
fins yellow, with brown base. Pelvic fins
yellow, with brown base. Fins all
thin and pointed.

137

Heteropneustes jordanii Jordan, Dresden
egg, May 14, 1908. (All in water)

External view, in water fish is a little irregular
green, bright red in a band yellow band on side,
broken 6-7 + 10 with an intermediate dot on
anterior margin a few between the bands. Upper
lip of lot of yellow areas, fore part of dorsal and anal clear
green, unmarked. Tip of pectoral, caudal, pelvic
white and a red tip on 7 and 11. A short green
line above eye 1/2. The opercular region
red, very thick and varying from dark red to
dark reddish brown. Mouth dark brown, other
parts are light brownish or brownish grey. Dorsal
crimson red, shading irregularly on left side to
yellow of body, pale, strong markings on
second dorsal, 6-7 and 11-12 a narrow crimson
band preceded by band 6-7 + 10. Intermediate
bands with black dots and yellow or golden yellow
with black dots as well as yellow band around
the crimson spots. Side of head grey
unmarked, mouth white
dorsal grey, fins black with dots,
5-11 + 12 + 13 magenta, also un
marked upper back, belly pinkish grey
longer than 3 years. Sides black and grey
red dorsal around grey, called a patch on
the back 6-11 + 12 + 13 with a band of brown
red on each side of a magenta patch on 11-13
which is less above. A nearly complete yellow
bridge across between bands 11-12. Quite deep pink
band 10-11 in hind portion of body
from 10-11 down between scales of body and ground
out July 4, 1908. q. brownish grey

Echeneis carunculatus n. sp.

1758-1800

egg on my rose bush June 7 1903, probably from
the birds' eggs which I heard first, but some
of the Robin eggs were not. Elliptical flattened
irregular white shell 20 mm. long by 14 mm. wide
water 14 mm. 1.8 x 1.2 mm. in thickness. See 12.
Hatched June 12 1.3 mm. elliptical pointed flattened
conical side sloping more towards slope. More
irreg. 0.4-0.11-0.12 large feet subequal colorless
whitish. Young thin smooth or rather wrinkled
brown back (0) 3-5, 11-13 2-brained 6-9 2-brained
0.3-4, 15 3-brained 6-9 2-brained. Gray brown
and whitish more adquate & not larger.

14 7.5 m. and was 3.00 ft. long. A white
2 6 20 ft. long. The body was very
3 7 " " very large. The head was black and
4 10 3.6 m. The body was black. The tail was
5 11 " " black. The body was black.
6 20 6 " " The body was black.
7 6.7 m. The body was black.
8 23 7.3 m. The body was black.
9 24 " " The body was black.
10 3 " " The body was black.
11 26 7.0 " " The body was black.
12 27 10 ft. The body was black.
13 28 " " The body was black.
14 29 11 feet The body was black.
15 30 12 " " The body was black.
16 31 " " The body was black.
17 32 12 to 13 " " The body was black.
18 33 14 feet The body was black.
19 34 16.8 " " All believe to be the largest fish
20 35 16 " " caught in the Mississippi River.
21 36 17 " " Found in the Mississippi River.
22 37 " " Found in the Mississippi River.
23 38 18 " " Found in the Mississippi River.
24 39 " " Found in the Mississippi River.
25 40 " " Found in the Mississippi River.
26 41 " " Found in the Mississippi River.

1393

Egg & egg remains of *S. b. signatus*, Hoff, 79352 from
Pa. in beach and maple. Two eggs by July 12, 1938
and the anterior half of the first larva is
the diameter of one egg, and the lateral
surface with an elliptical track around ridge and
the rim of the pronotum. Surface smooth, very
slightly disorganized with fine reticulation. Olive green
the dorsal rim of the pronotum white. Fins black
fin black on one side on belly of large and
in irregular curved rows.

1394

Parojoja on pine from Fisher Melton Highlands Mass. July 1908. Ovule to egg, and mature larva. Egg laid by infertile ♀) spherical, base well rounded metropyle strongly depressed, but smooth and rounded. Opaque white, greenish in the depression. Shell minutely granularly shagreened. D. 8 mm. 1st inst. 7 mm.

Laid in groups adhering to white foamy gauze.

Stage I (Aug 3) has rounded lobes shiny black flat before w. 5 mm. Body robust. Oily black and top of tubercles enlarged, protruding. Sordid lateral, the large tubercles black, giving a longitudinal border effect, trace a pale red line, then the last area between. Numerous tubercles along last one. An abd. in gives it large, irregular, apparent a midventral on 5 & 6 last tubercles. Other moderate, many band or elliptical hairy plate on the slender elongated leg.

This more from sister Aug 17 1908
Abd. 1. full (sh. 1.6 mm) rounded quadrangular. On either side strong black, body robust, darker in sides. Skin smooth between, a few blackish lateral food warts large rounded latera. Shiny black plumed tuft 5-6 on 2, single 1 5 & 12, shorter grayer tuft 6 & 7. A few unpaired white hair usually on 3, 4 and 8. Other hairs long, thin, grayish brown. Red tubercle on 10 & 11 reddish red pale. A pale band along subdistal, foll. 3-4 d. white with very black d. line.

Another Abd. brown shiny black. Body robust flattened warts large esp. 5 & 6. Blackish lateral salient (12 and above) & 14 grayish white. Hair moderate thin dark, a few short plumed ones from 1 usually 5 twice on 2 or 12. Ventral blackish. Head feet black and pale.

Sept 27 1912 (M. & L. C.) Same.

Shrub 5 ft - Hd. (shrub 1 ft) spun stiff web between rods and byt. by tide Sept. 10-

8/16/09

37

1395

Schizaea stellata? on low high bushes in an open
covered field like those of the Maine Aug 15, 1908.
Head elliptical, much higher than wide, scarcely exuding
Joint 2 feet separated by an enormous gap and before
D less than 1/2 as high as head D. Smooth, elongated,
green bristly, whitish hump on the face above
bearing the D, narrow on anterior and side parts. The
purple is mottled with green toward the center
as a little patch of purple mother on the side
above & behind the bacilli. W. 2.5 in. Body is not
compressed, sloping very gently 2 to 6 slightly to
and 12 slightly bunched, then tracheal 1, forming
high shiny brown cones, approximately parallel.
all the other tracheae minute except those on 1
which are perceptible but coarsened and most
elevated. Setae rather long pointed, anal feet elongated,
triangular, rather long. Green, mottled
with whitish patches, 1 transverse yellow
on the dorsum 6th. A narrow whitish purple band
anteriorly 2-5, 5 all purple except whitish post.
anteriorly; a white straight lateral stripe along the
below which oblique purple shades to the face above
most of 9-10 apical; a large dorsal purple patch
on 11 joints 12 which is more or less completely
purple shaded to the left joining the 9-10 purple
area; the purple band is a dorsal band with 12
thin anal feet darker purple. Small purple
patches at bases of various feet which are pale
The green is mottled with white and dotted with
purplish on one there
is considerable dense
purple shading on joint 6.

The purple is darker around
the spiracles 4, 5. There is a faint green band line
defined by the white spots they which are also
not obliquely green whitewashy 11-5 whitish.

1396

Woollyid on goldenrod a wood Lincolnville, Me. Aug 17 1908. Hd l. l shiny green held obliquely water in 2, antennae rather long fingers whitish Body rather slender, 2-4 tapering a little, & very little enlarged, feet 1 7-8 mm but used. Whitish green, rather strongly white shaded, & a lat line straight across white defined by darker edges. Slightly band white, even edges greenish filled in broad above narrowly with brown 2-4 as 12. IV 6-7 opposite lone edge 9, on II below but no very great differe. Tarsals white; i & ii large but not elevated. White black-ringed. but greenish. Shields concolorous, unicolorized.

1397

Phygelus? on Viburnum dentatum, Lincolnville Me. Aug. 1908. Wet at leaf after rainy day from 10 usually ate wave than one together. Body of insect loosely twobbed, widening and becoming very wide the middle part of body. Eat whole leaf later after twobbing it stem and cutting midrib.

Yara, Hd pale brown, slightly mottled well in 2. On large blots dull yellow black. Body striped with various purple separated by narrow irregularly edged with purplish white d. s. d. opp. bone but not slig. so are joined with 2 purple patches bone. Tarsocles whitish black. Anal plate greenish not brown.

1907 - Synsticta consimilis, Zell

Feb 10 1910 - or Webster 39

1398

Egg of Hemileucas quinquepunctata from Dr. Webster Head. Material Dec 24, 1908 (Received Dec 31) the year. Hd rounded shiny black, its setae rather coarse, whitish. Body subcylindrical smooth dark brown unspotted. Spine black except with single long whitish setae. On abd. i & ii a spine; ii from skin; iii on a spine, iv + v on a spine. Lg plate with 2 small setae. On 12 a single pointed d. spine from skin. I, ii from skin. On 3 a single pointed spine just, edge b-d and single lat. more from skin. Anal plate bare black but with setae, anal post plate

March 6
1972

1399

Montane sunfish caught 9 miles July 15, 1971 at Bryson NC. Egg, and July 16-17, 1971 laid by an old female fish 10 in. long. Red scales on lateral, gently flattened, uniform, shiny pale yellow back & from head on posterior 3/4 of body well obscured by each change of egg and covered loosely with short stiff white hair-like and several eggs but stand up upright edges of same. Scales on lateral and dorsal fins are slightly raised at the ends. Dorsal and anal fins are rounded. The ventral fins are deeply lobed.

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VI
Dorsum purple with distinct white patches on 11 faces
dividing into 4 stripes & 3d hairy purple line. Dorsal
purple yellow with central vermilion line, the same
vermilion tinted, Horns 3 brown-red. Lat. Space
with pale patches over 4 faces, pale yellow below.
having bright line above toward a central slightly
red. A vivid purple margin line each side of the ridge
in interspace. Intercostal granular dots in 11 spaces
angle 8.5 by 10.5 mm. Skin rather heavily granular, slaggered.

" 27	11.0	Lat	Obg. 2.6	Elongate elliptical, obscure
" 28	12	"	yellow streaked uniformly long sides	
" 29	13	to 14.0	Glossy, 3d straight. Horns O. 3.3 and 1.13	
" 30	"	"	Lat. Line curved rather long and dark	
Sp. 1	"	"	Yellow O. 2.1 & 1.3 4, 6-12 broadest at	
" 2	"	"	Apex. Vermilion in a slender transverse	

Total 13.5 mm.
" 40.6 lat
" 5 spin
yellow. 4, 6 lat, Spines with 3 purple
hair lines, center stripe, thin line wavy, 2 smooth
line & 5 v. faces. Horns very short (1) & 1st granular
but hairless. Skin granular slaggered. Dorsal line
a 3d. of all tail hairs with a few callipers, the
spines above the hairs O. 1.5 & 1.12 largest & earliest calliper
shed left 3. Some end horn patches black above the long
O. 1 and short O. 12. Callipers at base of O. 3 & 11
3 purple stained, its long hairs tipped with purple.
O. 6 edge vermilion tinted the rounded turbinate
short blue. Dorsum pale pink, the line 3
nearly black, a slight 3d. wavy O. 6 face dark
with raised granular edges. A yellowish track to
edge. Side has pinkish, its central line broken
not wavy, rather purplish than black, the copper e
have horns black, upper well raised lower less so.
5-v. carmine with a blackish line, the 5-v. edge
reddish. Very horn O. 13 purple is also O. 6
4 & 6 slightly. Skin rather densely clear granular
Spines in horns white with black tips.

VII

1400
Hypopygium divided across dorsum H. 9. Dorsum
in chitinous part glabrous & smooth +
egg very finely ribbed, always flattened on
the upper or lower sides, never perpendicular
granular, white (in alcohol). Size 4.2-7.5 mm.
With 5 spines. Dorsum granular, slaggered,
5 long 1 short, 1st spine with sharp lateral
ridges. Dorsum with 3d. wavy lines nearly
close together in a transverse. Tail wide
around base. Dorsum 7.5-8.5 mm. Dorsum H. 9-11
mouth brown. Body cylindrical slender uniform
color or yellow. Gills coarse from broad
rounded borders, not mixed in base with other
lines. No opercular margin line, gills superposed
approximately, vi wanting on 1st abd line.
Eyes long slender normal.
(Abd. 5-8 10-12; no certainty in the stages and
abdominal segments, which will all be
black spots 3d. 3rd on the side.)
Dorsum 14.5-16.5 mm. lighter than white with dorsal
& ventral & high midline with brown (white in
water) lines and by anterior spine 3d. and
when 5 pigmented scales in 3 ant. columns, which
body cylindrical slender uniform, numerous
anterior appendages, the first slender & thick
the greatest slightly expanded. The midline a
yellowish brown & more wider, scales from few
anterior appendages, the 1st on the 1st
abdominal line, 11 & 12 brown, 13-15
well pigmented. The 2 next 6 in shield & 2
long, shouldered, reach for the 3rd line
1-7, 10-12, 13-16 to a long median
turbinate, the 1st 2 in line, 11-12 about 10 &
about 11 mm. Very long pointed at edge of shield
a 2 row over 11a-11b on 3. Spines elliptical
that 1st larger than the others.
Cocoon white, which adhered to file of scales between
Ridge 10-11, followed by dark brownish edges

With a row of very blunt 15 mm. long
with pointed tips. 10 x 5 mm. Surface smooth
with whitish markings.

1401

Lepta on wild morning glory, Chain Bridge
road, D.C., Aug. 14, 1917 (with Lander)

Length 4-5 mm. Hd rounded quadrilatera,
shallowly bilobed, a large dark brown
molt & margin edged white line running
up a each lobe & a point on below.
Hd broad flat so the line run in the
direction of body. Body cylindrical, width
4-5 10-12 cuttated, feet normal, mouth
joined annulated, dark brown, the sides
marked with white oblique line. The
marking starts on 6, as a triple step and
of white dots on a reddish ground, concentri-
cated into 2 oblique white marks on the
ant. labrum & 6-9 the large streak in the
body, the upper running from before the
spiracle to ant. edge of segment subtending
a dorsal and 5d band of pale white dots
running glide length of labra, 2-5 also
dotted laterally and a little marked
in dark brown a few color on the posterior
part laterally. Ventre with a narrow white
line the whole length and several rows of
white dots between the 2nd lateral band.
a pale stepped area 10-13 running out
post of 10 and forming a white line on post
of 13. The feet dark brown, dotted with white
spine Aug. 16 a large loose web almost invisible
in the angles of which his tail is as if hanging in
the air between the leaves.

Out Aug 21, 1917 Eustria amata var. gracilis

1402

Larvae on a weed and box elder, Plummerville, Md., by H. S. Barber, Aug. 17, 1917.

Hd rounded bilobed, small, violaceous hair, dark on vertex, ~~dark brown~~, body cylindrical, thick, a little angled & enlarged bases of II and III on 6 & 12 angled & enlarged; bases, thorax, small hairs at an angle at 4. Disk brown (wing flaps laterally 5-7) marked with black dots on 5-9, mainly pale yellow bands which form elliptical antennae. On wing laterally a bright yellow oblique mark, half angled on 8, a band on 9, running in a line to base of foot on 10, all other markings shaded & mottled; them distinct.

1403

Noctuid on ~~old man's~~^{aster} flowers, Glen-
carlyn, Va. by H. S. Barber, Oct. 3, 1922.

Hd rounded, vertex under 2, pale green on other sides with diffuse black hairs. Face black. A broad pale green lobe clippers, epistoma pale green. Antennae pale. Skin dull, wrinkled, disgreened. A broad light orange red dorsal line, constructed on 2, and on lump on 12. S-d black running down broadly to 13 and narrowly ant. c post. on scap. before pale pea-green. A line bright orange red subdorsal line slightly raised on scap without border, but black on tubercles and hairs in incisives and a post. ventr. & feet pale pea-green. The pale green runs up to dorsal red line on 2 (ant c post) 12, 13 and 14. Tubercles invisible. spiracle

Cucullia alfarata Stock

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